Application No.: 10/019,783 Docket No.: SAE-0005

AMENDMENTS TO THE CLAIMS, COMPLETE LISTING OF CLAIMS IN ASCENDING ORDER WITH STATUS INDICATOR

Please amend the following claims as indicated.

- 1. (Currently Amended) A method for producing a transgenic gramineae having iron deficiency resistance, comprising a step of introducing a genome gene that codes an enzyme in biosynthetic pathway of mugineic acids transforming a gramineae with a polynucleotide by using a vector pIG121Hm or pBIGRZ, wherein the polynucleotide is selected from the group consisting of
 - (A) a polynucleotide encoding an amino acid sequence of SEQ ID NO: 1,
 - (B) a polynucleotide encoding an amino acid sequence of SEQ ID NO: 2,
- (C) a polynucleotide which encodes an enzyme exhibiting nicotianamine amino transferase (NAAT) activity and can hybridize with polynucleotide (A) or (B) under stringent conditions of a hybridization buffer comprising 6 x SSPE, 5 x Denhart solution, 0.1% SDS, and 100 mg/ml altered salmon spermary DNA, and a hybridization temperature of 65 degrees, and (D) a polynucleotide comprising the base sequence of SEQ ID NO. 3.
 - 2. (Canceled).
- 3. (Currently Amended)—A The method in accordance with claim 1, wherein the polynucleotide further comprises a promoter, used is said promoter being CaMV35S.
 - 4. (Canceled).
- 5. (Currently Amended)—A The method in accordance with claim 1, wherein the genome polynucleotide is a barley—genome naat gene.
 - 6. (Canceled).
- 7. (Currently Amended) A <u>transgenic</u> gramineae with iron deficiency resistance manufactured <u>produced</u> through the method in accordance with any one of claims 1 to 3, 5 and 6 5.

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8. (Currently Amended) The seeds A seed of the transgenic gramineae in accordance with claim 7, wherein the seed comprises a polynucleotide selected from the group consisting of (A) a polynucleotide encoding an amino acid sequence of SEQ ID NO: 1,

(B) a polynucleotide encoding an amino acid sequence of SEQ ID NO: 2,

(C) a polynucleotide which encodes an enzyme exhibiting nicotianamine amino transferase (NAAT) activity and can hybridize with polynucleotide (A) or (B) under stringent conditions of a hybridization buffer comprising 6 x SSPE, 5 x Denhart solution, 0.1% SDS, and 100 mg/ml altered salmon spermary DNA, and a hybridization temperature of 65 degrees, and

(D) a polynucleotide comprising the base sequence of SEQ ID NO. 3.

- 9. (Currently Amended) The cells A cell of the transgenic gramineae in accordance with claim 7, wherein the cell comprises a polynucleotide selected from the group consisting of (A) a polynucleotide encoding an amino acid sequence of SEQ ID NO: 1,

 (B) a polynucleotide encoding an amino acid sequence of SEQ ID NO: 2,

 (C) a polynucleotide which encodes an enzyme exhibiting nicotianamine amino transferase (NAAT) activity and can hybridize with polynucleotide (A) or (B) under stringent conditions of a hybridization buffer comprising 6 x SSPE, 5 x Denhart solution, 0.1% SDS, and 100 mg/ml altered salmon spermary DNA, and a hybridization temperature of 65 degrees, and (D) a polynucleotide comprising the base sequence of SEQ ID NO. 3.
- 10. (Currently Amended) A method of growing gramineae in an iron deficient field comprising planting the transgenic gramineae of in accordance with claim 7, or seeds thereof in said field under conditions to promote growth of said gramineae.
- 11. (Original) A crop of gramineae obtained through the method in accordance with claim 10.
- 12. (New) The transgenic gramineae in accordance with claim 7, wherein the polynucleotide is a barley *naat* gene.